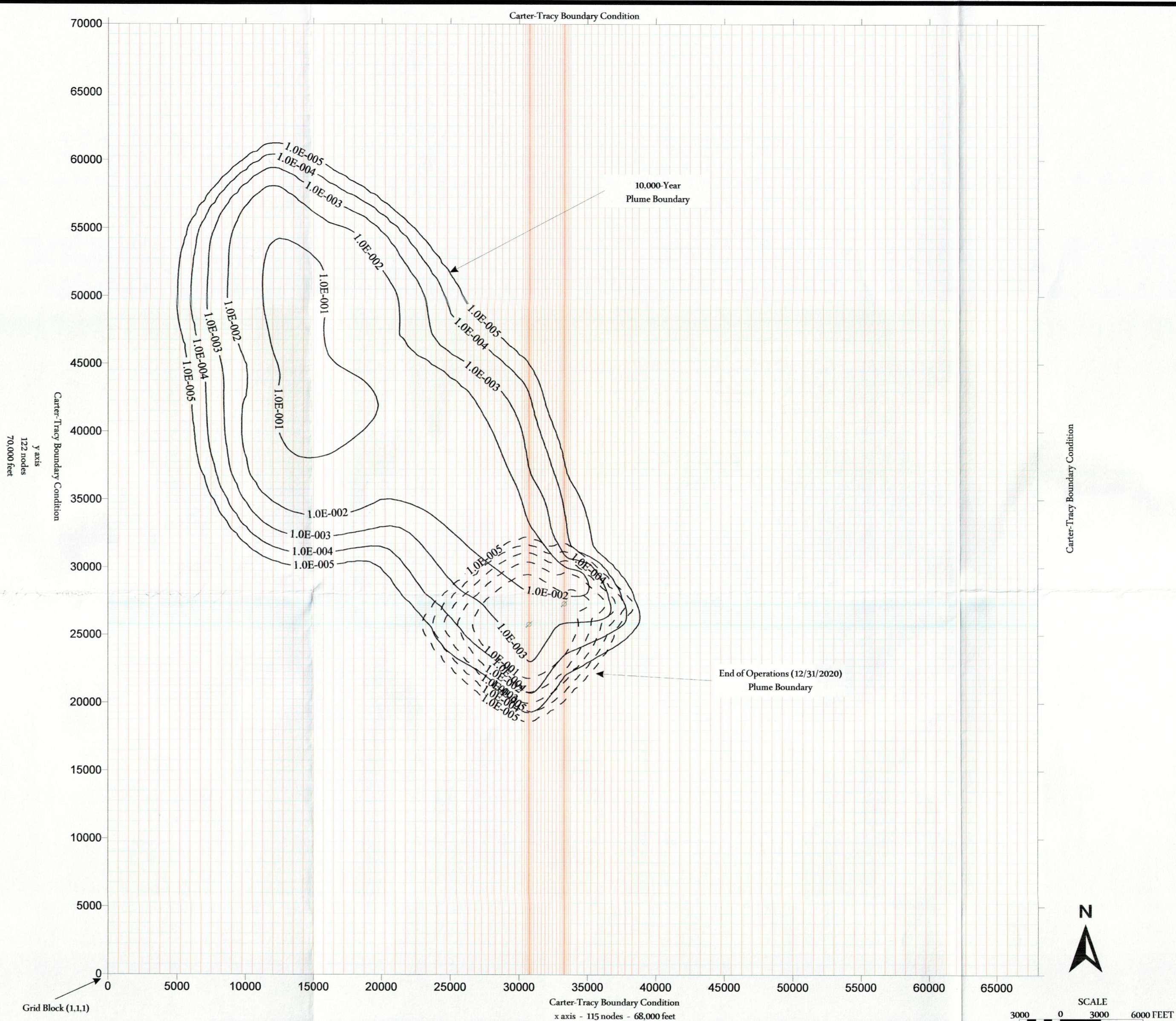


SWIFT Input File No.:	Model Run Description	Input Parameters	Parameter Value
ExMob_EF.dat	Models waste plume migration for 10,000 years in Frio E&F Sand. End of operations on 12/31/2020. Historical volume of 700 gpm into WDW-397 from July 1, 2008 until December 31, 2008. Future volume at an injection rate of 1,200 gpm into WDW-397 from January 1, 2009 until December 31, 2020.	Reservoir Flow Capacity Hydraulic Conductivity Intrinsic Permeability (k) Porosity Reservoir Thickness (h) Reservoir Dip Injectate Density Injectate Specific Gravity Injectate Viscosity* Reservoir Brine Density Reservoir Brine Specific Gravity Reservoir Brine Viscosity* Ground Water Flow Rate Rock Compressibility Fluid Compressibility Reservoir Temperature SWIFT Effective Diffusion Coefficient Longitudinal and Lateral Dispersivity	300,000 mD-ft 11.944 ft/day 2,000 mD 0.28 150 ft variable structure 61.45 lb/ft³ @ 169 °F 1.00 @ 60 °F 0.364 cP @ 169 °F 66.18 lb/ft³ @ 169 °F 1.083 @ 60 °F 0.487 cP @ 169 °F 0.0 ft/yr 3.20 x 10⁻⁶ psi⁻¹ 2.43 x 10⁻⁶ psi⁻¹ 169 °F 8.33 x 10⁻⁴ ft²/day 100 ft and 10 ft

* variable viscosity with temperature from 60 °F to 200 °F
MODEL RESULTS SUMMARY: The end of operation waste plume is ovoid in shape. The end of operations waste plume (12/31/2020) is approximately 14,100 feet long and approximately 13,650 feet wide. The injected waste plume extends 38,500 feet up-gradient toward Clinton Dome, approximately 14,500 feet up-gradient toward the northeast, and 6,600 feet down-gradient from the WDW-397 injection well and is approximately 24,200 feet wide at its widest point after 10,000 years.



SWIFT Input File No.:	Model Run Description	Input Parameters	Parameter Value
ExMob_EF_398.dat	Models waste plume migration for 10,000 years in Frio E&F Sand. End of operations on 12/31/2020. Historical volume of 700 gpm into WDW-397 from July 1, 2008 until December 31, 2008. Future volume at an injection rate of 1,200 gpm into WDW-398 from January 1, 2009 until December 31, 2020.	Reservoir Flow Capacity Hydraulic Conductivity Intrinsic Permeability (k) Porosity Reservoir Thickness (h) Reservoir Dip Injectate Density Injectate Specific Gravity Injectate Viscosity* Reservoir Brine Density Reservoir Brine Specific Gravity Reservoir Brine Viscosity* Ground Water Flow Rate Rock Compressibility Fluid Compressibility Reservoir Temperature SWIFT Effective Diffusion Coefficient Longitudinal and Lateral Dispersivity	300,000 mD-ft 11.944 ft/day 2,000 mD 0.28 150 ft variable structure 61.45 lb/ft³ @ 169 °F 1.00 @ 60 °F 0.364 cP @ 169 °F 66.18 lb/ft³ @ 169 °F 1.083 @ 60 °F 0.487 cP @ 169 °F 0.0 ft/yr 3.20 x 10⁻⁶ psi⁻¹ 2.43 x 10⁻⁶ psi⁻¹ 169 °F 8.33 x 10⁻⁴ ft²/day 100 ft and 10 ft

* variable viscosity with temperature from 60 °F to 200 °F
MODEL RESULTS SUMMARY: The end of operation waste plume is ovoid in shape. The end of operations waste plume (12/31/2020) is approximately 15,400 feet long and approximately 13,500 feet wide. The injected waste plume extends 40,400 feet up-gradient toward Clinton Dome and 5,300 feet down-gradient from the WDW-398 injection well and is approximately 24,000 feet wide at its widest point after 10,000 years.

PLATE 7-13

TERRA
DYNAMICS INC

LATERAL MIGRATION
MODEL GRID AND RESULTS
(ExMob_EF & ExMob_EF_398)
(Frio E&F Sand Lateral Migration Model)

PREPARED FOR
EXXON MOBIL CORPORATION
PASADENA, TEXAS

DRAWN BY:
DESIGNED BY:
CHECKED BY:

tdm
SAME
T. Moody

SCALE:
As Indicated

DATE:
02-02-2011
JOB NO.:
11-101